

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.(currently amended) In a method of filtering a liquid using a filter comprising a flexible housing having an inlet port and outlet port for the liquid and a sheet-like filter element for removing undesired components from the liquid, with the inlet port being separated from the outlet port by the filter element, while feeding the liquid by gravity, ~~[[a]]~~ the method being characterized by maintaining the pressure at the outlet side of the filter at 0 mmHg or more above atmospheric pressure.

2.(original) The method according to claim 1, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by a combination of hydrodynamic characteristics of the filter and the flow channel on the upstream side or the downstream side of the filter.

3.(original) The method according to claim 2, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by a combination of the upstream head drop of the filter, the downstream head drop of the filter, the total head drop of the upstream head drop, the downstream head drop and the head drop between the liquid inlet port and outlet port of the filter, the resistance of the upstream side flow channel, the resistance of the downstream side flow channel, and the resistance of the filter.

4. (original) The method according to claim 2, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by adjusting the total head drop of the filter.

5. (currently amended) The method according to claim 3 [[or 4]], wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by maintaining the head drop on the upstream side of the filter larger than the head drop on the downstream side.

6. (currently amended) The method according to ~~any one of claims 3-5~~ claim 3, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by maintaining the resistance of the downstream side flow channel of the filter larger than the resistance of the upstream side flow channel.

7. (original) The method according to claim 6, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by maintaining the length of the downstream side flow channel of the filter larger than the length of the upstream side flow channel.

8. (currently amended) The method according to claim 6 [[or 7]], wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by having the internal diameter of the downstream side flow channel of the filter smaller than the internal diameter of the upstream side flow channel, partly or all through the entire length of the downstream side flow channel.

9. (currently amended) The method according to ~~any one of~~ ~~claims 6-8~~ claim 6, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by maintaining the length of the downstream side flow channel of the filter larger than the head drop on the downstream side.

10. (currently amended) The method according to ~~any one~~ ~~of claims 6-9~~ claim 6, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by maintaining the resistance at the liquid outlet port of the filter larger than the resistance at the liquid inlet port.

11. (currently amended) In a method of filtering a liquid using a filter comprising a flexible housing having an inlet port and outlet port for the liquid and a sheet-like filter element for removing undesired components from the liquid, with the inlet port being separated from the outlet port by the filter element, ~~[[a]]~~ the method being characterized by maintaining the pressure at the outlet side of the filter at 0 mmHg or more above atmospheric pressure by controlling a feed rate per unit time of a feed pump installed in an upstream flow channel and/or downstream flow channel of the filter.

12. (original) The method according to claim 11, wherein the pressure at the outlet side is maintained at 0 mmHg or more above atmospheric pressure by detecting the pressure at the outlet side using a pressure gauge connected to a flow channel branching from the outlet side of the filter and controlling the feed pump installed in the upstream flow channel and/or downstream flow channel of the filter according to the detected pressure value.

13. (currently amended) The method according to ~~any one~~ ~~of claims 1-12~~ claim 1, wherein the filter does not comprise a

spacer for securing a flow channel at the outlet side of the filter.

14. (currently amended) The method according to ~~any one of claims 1-13~~ claim 1, wherein a filter of which the outlet side flexible housing has not been processed to provide irregularity as a spacer for securing a flow channel at the filter outlet side and/or a filter in which a tube is not inserted between the outlet side flexible housing and the sheet-like filter as a spacer for securing a flow channel at the filter outlet side are/is used.

15. (currently amended) The method according to ~~any one of claims 1-14~~ claim 1, wherein the liquid to be filtered is blood.

16. (currently amended) The method according to ~~any one of claims 1-15~~ claim 1, wherein the liquid to be filtered is blood and the filter is used for removal of leukocytes and/or aggregates.

17. (currently amended) In a filtering system for a liquid comprising a filter comprising a flexible housing having an inlet port and outlet port for a liquid, a sheet-like filter element for removing undesired components from the liquid, with the liquid inlet port and the outlet port separated from each other by the filter element, a reservoir bag for storing the liquid to be filtered, an upstream side flow channel connecting the filter inlet port with the reservoir bag, a filtered liquid recovery bag, and a downstream side flow channel connecting the filter outlet port with the recovery bag, wherein the liquid stored in the reservoir bag is filtered by gravity and recovered in the filtered liquid recovery bag,

[[a]] the improvement wherein the filtering system
~~characterized by having~~ has the above components connected so
that the pressure at the outlet side of the filter is
maintained at 0 mmHg or more above atmospheric pressure.

18.(original) The system according to claim 17, wherein
the total head drop of the filter is adjusted so that the
pressure at the outlet side of the filter is maintained at 0
mmHg or more above atmospheric pressure.

19.(currently amended) The system according to claim 17
[[or 18]], wherein the head drop on the upstream side of the
filter is larger than the head drop on the downstream side so
that the pressure at the outlet side of the filter is
maintained at 0 mmHg or more above atmospheric pressure.

20.(currently amended) The system according to ~~any one~~
~~of claims 17-19~~ claim 17, wherein the resistance of the
downstream side flow channel of the filter is larger than the
resistance of the upstream side flow channel so that the
pressure at the outlet side of the filter is maintained at 0
mmHg or more above atmospheric pressure.

21.(original) The system according to claim 20, wherein
the length of the downstream side flow channel of the filter
is larger than the length of the upstream side flow channel so
that the pressure at the outlet side of the filter is
maintained at 0 mmHg or more above atmospheric pressure.

22.(currently amended) The system according to claim 20
[[or 21]], wherein the internal diameter of the downstream
side flow channel of the filter is smaller than the internal
diameter of the upstream side flow channel, partly or all
through the entire length of the downstream side flow channel,

so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

23. (currently amended) The system according to ~~any one of claims 20-22~~ claim 20, further comprising a material to narrow an internal diameter of the downstream side flow channel of the filter so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

24. (currently amended) The system according to ~~any one of claims 20-23~~ claim 20, wherein a resistive element is inserted in part of or all through the downstream side flow channel of the filter so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

25. (currently amended) The system according to ~~any one of claims 20 to 24~~ claim 20, wherein the length of the downstream side flow channel of the filter is larger than the head drop on the downstream side so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

26. (currently amended) The system according to ~~any one of claims 20-25~~ claim 20, wherein a part or the entire length of downstream side flow channel of the filter is bundled or coiled so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

27. (currently amended) The system according to ~~any one of claims 20-26~~ claim 20, wherein the system comprises a bypass flow channel to connect the intermediate of the downstream side flow channel of the filter or the filtered

liquid recovery bag with the intermediate of the upstream side flow channel of the filter or the reservoir bag for the liquid to be filtered, the bypass flow channel is provided with a flow controlling member, and the length of the bypass flow channel is shorter than the total of the length of the upstream side flow channel and the filter and the downstream side flow channel located between the upper and lower joints of the bypass flow channel, so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

28. (currently amended) The system according to ~~any one of claims 20-27~~ claim 20, wherein the resistance of the liquid outlet port of the filter is larger than the resistance of the liquid inlet port of the filter so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

29. (currently amended) In a filtering system for a liquid comprising a filter comprising a flexible housing having an inlet port and outlet port for the liquid, a sheet-like filter element for removing undesired components from the liquid, with the liquid inlet port and the outlet port separated from each other by the filter element, an upstream side flow channel connected to the filter inlet port, a filtered liquid recovery bag, a downstream side flow channel connecting the filter outlet port with the recovery bag, and a feed pump installed in the upstream side flow channel and/or the downstream side flow channel,

~~a filtering system~~ wherein the feed rate per unit time of a feed pump installed in an upstream flow channel and/or downstream flow channel of the filter ~~can be~~ is controlled so that the pressure at the outlet side of the filter is maintained at 0 mmHg or more above atmospheric pressure.

30.(original) The system according to claim 29, wherein a pressure gauge is installed in a flow channel branching from the outlet side of the filter to detect the pressure at the outlet side with respect to the atmospheric pressure.

31.(currently amended) The system according to ~~any one of claims 17-30~~ claim 17, comprising the filter without a spacer for securing a flow channel at the outlet side of the filter.

32.(currently amended) The system according to ~~any one of claims 17-31~~ claim 17, wherein a filter of which the outlet side flexible housing has not been processed to provide irregularity as a spacer for securing a flow channel at the filter outlet port and/or a filter in which a tube is not inserted between the outlet side flexible housing and the sheet-like filter as a spacer for securing a flow channel at the filter outlet side are/is used.

33.(currently amended) The system according to ~~any one of claims 17-32~~ claim 17, wherein the liquid to be filtered is blood.

34.(currently amended) The system according to ~~any one of claims 17-33~~ claim 17, wherein the liquid to be filtered is blood and the filter is used for removal of leukocytes and/or aggregates.

35.(currently amended) A liquid filtering method using the system according to ~~any one of claims 17-34~~ claim 17.